PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 54923PCT	FOR FÜRTHER ACTION	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No.	International filing date (day/month/ye	ear) (Earliest) Priority Date (day/month/year)
PCT/AU2004/001415	15 October 2004	17 October 2003
Applicant	19 001001 2007	
VICIOUS POWER PTY LTD	et al	
This international search report has been prep Article 18. A copy is being transmitted to the	ared by this International Searching Au International Bureau.	thority and is transmitted to the applicant according to
This international search report consists of a t	otal of 5 sheets.	
It is also accompanied by a copy	y of each prior art document cited in this	s report.
1 Basis of the report		
it was filed, unless otherwise indicated	d under this item.	pasis of the international application in the language in which
The international search Authority (Rule 23.1(b)		slation of the international application furnished to this
b. With regard to any nucleotide a	nd/or amino acid sequence disclosed i	n the international application, see Box No. I.
2. Certain claims were found uns	searchable (See Box No. II).	
3. Unity of invention is lacking (S	See Box No. III).	
4. With regard to the title,		
X the text is approved as submitted		
the text has been established by	this Authority to read as follows:	
5. With regard to the abstract,		
the text is approved as submitted	d by the applicant.	·
X the text has been established, ac one month from the date of mail	cording to Rule 38.2(b), by this Author ling of this international search report, s	ity as it appears in Box No. IV. The applicant may, within submit comments to this Authority.
6. With regard to the drawings,		
a. the figure of the drawings to be publi	shed with the abstract is Figure No. 5	
X as suggested by the ap	plicant.	
as selected by this Aut	hority, because the applicant failed to s	uggest a figure.
as selected by this Aut	hority, because this figure better charac	terizes the invention.
b. none of the figures is to be publ	ished with the abstract.	

INTERNATIONAL SEARCH REPORT

Box No. IV Text of the Abstract (Continuation of item 5 of the first sheet)

International application No.

PCT/AU2004/001415

A power controller for use	with lighting systems	including a direct	current voltage	source [50], a	coil of know
industance [55] a syritch me	one [54] adopted to co	ntrol application of	the source voltag	e to the coil, me	ans adapted t

inductance [55], a switch means [54] adapted to control application of the so select a required duty cycle for the switch such that the input power level is substantially constant, and means [51] adapted to control operation of the switch such that this selected duty cycle is effected. A switch mode DC-DC converter is disclosed, wherein regulation occurs by manipulation of input power, without current monitoring.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2004/001415

Α. CLASSIFICATION OF SUBJECT MATTER Int. Cl. 7; H05B 41/16, H02M 3/22 According to International Patent Classification (IPC) or to both national classification and IPC FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) DWPI, esp@cenet IPC: H05B-31/-,33/-,35/-,37/-,39/-,41/-,43/-; H02M-3/-,7/-,11/-; H01J-61/-,63/-,65/-; G05F & keywords: LIGHT, SWITCHED MODE, POWER SUPPLY, DUTY CYCLE, COIL, REGULATE and other terms and phrases. C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to Citation of document, with indication, where appropriate, of the relevant passages Category* claim No. EP 1001520 A2 (SONY CORPORATION TOKYO (JP)) 17 May 2000 1-21 X See whole document WO2001/086796 A1 (SONY CORPORATION) 15 November 2001 1-21 $\cdot \mathbf{X}$ See whole document WO 2002/039570 A1 (PARK JOON-HO) 16 May 2002 1-21 X See whole document US 5625538 A (LEE ET AL) 29 April 1997 1-21 See whole document, especially abstract, Fig.3, column 3 line 60 - column 5 line 16, X column 8 line 47 - column 9 line 30. See patent family annex \mathbf{X} $|\mathbf{x}|$ Further documents are listed in the continuation of Box C Special categories of cited documents: later document published after the international filing date or priority date and not in "A" document defining the general state of the art which is conflict with the application but cited to understand the principle or theory not considered to be of particular relevance underlying the invention document of particular relevance; the claimed invention cannot be considered novel "X" "E" earlier application or patent but published on or after the or cannot be considered to involve an inventive step when the document is taken international filing date document of particular relevance; the claimed invention cannot be considered to document which may throw doubts on priority claim(s) "L" involve an inventive step when the document is combined with one or more other or which is cited to establish the publication date of such documents, such combination being obvious to a person skilled in the art another citation or other special reason (as specified) document referring to an oral disclosure, use, exhibition "O" document member of the same patent family **"&"** or other means document published prior to the international filing date but later than the priority date claimed Date of mailing of the international search report Date of the actual completion of the international search 0 6 JAN 2005 14 December 2004 Authorized officer Name and mailing address of the ISA/AU **AUSTRALIAN PATENT OFFICE** PO BOX 200, WODEN ACT 2606, AUSTRALIA BAYER MITROVIC E-mail address: pct@ipaustralia.gov.au Telephone No: (02) 6283 2164 Facsimile No. (02) 6285 3929

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU2004/001415

C (Continuati	on). DOCUMENTS CONSIDERED TO BE RELEVANT	
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
х	FR 2688359 A (ENERTRONIC) 10 September 1993 See abstract from esp@cenet and machine translation of the original document.	1-21
x	GB 2261779 A (TOKYO ELECTRIC CO LTD) 26 May 1993 See whole document.	1-21
x	US 5298836 A (BACKMUND ET AL) 29 March 1994 See whole document, especially abstract and Fig.1-7	1-21
x	US 5696670 A (ROEDERER ET AL) 9 December 1997 See whole document, especially abstract and Fig.1	1-21
X	Derwent Abstract Accession No. 2003-271861/27, Class U12, JP 2003047242 A (SANKEN DENKI KK) 14 February 2003 See abstract.	1-21
x	Derwent Abstract Accession No.98-575792/49, Class X26, JP 10257765 A (ORIGIN ELECTRIC CO LTD) 25 September 1998 See abstract.	1-21
x	Derwent Abstract Accession No.96-169547/17, Class U21 U24, JP 08051774 A (NEC CORP) 20 February 1996 See abstract.	1-21
	·	

INTERN. . IONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU2004/001415

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member					
EP	1001520	JР	2000152617	KR	2000035380	US	6317337
WO	0186796	AU	44319/00	BR	0012366	CA	2379089
		EP	1281233	PL	353320	US	6587358
wo	0239570	AU	14363/02	KR	2002036166		
US	5625538	DE	4412544	JP	6327247	NL	9400580
FR	2688359						
GB	2261779	JР	5161366	JP	5211774	Љ	5284757
		JР	5336755	Љ	10108473	US	5331534
US	5298836	DE	4128314	EP	0529551		
US	5696670						
Љ	2003047242					*	
JР	10257765						
JР	8051774						

Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.

END OF ANNEX